

YS
Universal cylinder

Single-acting with spring return, capacity 5 - 100 t

Robust construction with long guides allows the units to withstand abuse and better tolerate eccentric and side loading, yet is convenient to use with only one quick-release coupler hose connection and a spring return.

Universal cylinders are designed for all jobs where high forces but compact dimensions are required: e.g. straightening steel constructions, removing parts like shafts, axles, lifting, positioning, weighing, supporting, testing as well as for all general assembly and repair applications. Due to the various mounting threads the cylinders can easily be installed in clamping devices, welding fixtures, frame presses etc.

Features

- Yale ChroMo-Design.
- Operating pressure max. 700 bar.
- Single-acting with spring return.
- Robust design with long piston bearings to withstand eccentric loading.
- Cylinder body and piston are made from solid chromium-molybdenum steel and heat-treated.
- Hard-chromium plated piston with replaceable, heat-treated saddle.
- Metric mounting threads on cylinder collar, in the base and piston rod (5 to 30 t).
- Stop ring can bear full capacity (pressure) and is fitted with dirt wiper.
- Interchangeable hardened saddle.
- Dirt wiper protects against dirt.
- Oil port thread 3/8 NPT.
- Incl. female coupler half CFY-1.
- YS-50/100 and YS-50/160 with carrying handle.
- YS-50/320 up to YS-100/200 with lifting rings.



INFO

Selection charts “cylinder/hand pumps” can be found on pages 438 - 439.

Travel-speed charts are supplied on pages 440 - 441.

Technical data YS

Cylinder size t	Model	Art.-No.	Capacity kN	Stroke mm	Effective plunger area cm²	Oil volume max. cm³	Closed height mm	Cylinder outside diameter mm	Weight kg
5	**YS-5/15**	N11100001	50	15	7.2	11	45	41	0.9
5	**YS-5/25**	N11100002	50	25	7.2	18	97	42	1.0
5	**YS-5/75**	N11100003	50	75	7.2	53	157	42	1.5
5	**YS-5/127**	N11100004	50	127	7.2	90	214	42	2.0
5	**YS-5/180**	N11100005	50	180	7.2	127	267	42	2.4
10	**YS-10/25**	N11100006	100	25	14.3	37	90	57	1.6
10	**YS-10/50**	N11100007	100	50	14.3	73	125	57	2.1
10	**YS-10/100**	N11100008	100	100	14.3	146	178	57	2.8
10	**YS-10/150**	N11100009	100	150	14.3	218	250	57	4.1
10	**YS-10/200**	N11100010	100	200	14.3	291	300	57	4.7
10	**YS-10/250**	N11100011	100	250	14.3	363	352	57	5.5
10	**YS-10/300**	N11100012	100	300	14.3	436	407	57	6.3
15	**YS-15/25**	N11100013	150	25	21.5	53	110	67	2.7
15	**YS-15/50**	N11100014	150	50	21.5	106	140	67	3.3
15	**YS-15/100**	N11100015	150	100	21.5	213	190	67	4.3
15	**YS-15/150**	N11100016	150	150	21.5	319	260	67	5.8
15	**YS-15/200**	N11100017	150	200	21.5	425	310	67	7.0
15	**YS-15/250**	N11100018	150	250	21.5	531	365	67	8.0
15	**YS-15/300**	N11100019	150	300	21.5	637	420	67	9.0
15	**YS-15/350**	N11100020	150	350	21.5	744	472	67	10.0
23	**YS-23/25**	N11100021	230	25	32.9	83	116	85	5.0
23	**YS-23/50**	N11100022	230	50	32.9	166	150	85	6.0
23	**YS-23/100**	N11100023	230	100	32.9	332	202	85	7.5
23	**YS-23/160**	N11100024	230	160	32.9	531	277	85	10.0
23	**YS-23/210**	N11100025	230	210	32.9	697	330	85	12.0
23	**YS-23/250**	N11100026	230	250	32.9	830	376	85	13.5
23	**YS-23/300**	N11100027	230	300	32.9	996	428	85	15.0
23	**YS-23/345**	N11100028	230	345	32.9	1145	477	85	16.5
30	**YS-30/125**	N11100029	300	125	42.9	552	245	102	13.0
30	**YS-30/200**	N11100030	300	200	42.9	884	325	102	17.0
50	**YS-50/50**	N11100031	500	50	71.5	355	170	125	15.0
50	**YS-50/100**	N11100032	500	100	71.5	709	220	125	19.0
50	**YS-50/160**	N11100033	500	160	71.5	1135	285	125	24.0
50	**YS-50/320**	N11100034	500	320	71.5	2269	460	125	37.0
70	**YS-70/150**	N11100035	700	150	100.0	1478	285	146	32.0
70	**YS-70/330**	N11100036	700	330	100.0	3252	490	146	52.0
100	**YS-100/100**	N11100476	1000	100	143.0	1432	275	180	43.0
100	**YS-100/200**	N11100037	1000	200	143.0	2863	375	180	64.0



Accessories for YS cylinders like lifting claws, piston plates, base adaptors, extension tubes, support plates and threaded flanges are also available



Support plates are available as accessories



Threaded flanges are available as accessories

INFO

For accessories for cylinders series YS please see pages 380 - 382.

Dimensions YS

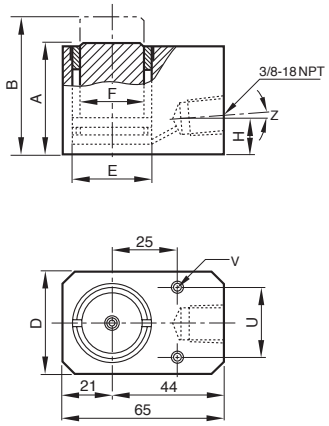
Model	YS-5/15	YS-5/25	YS-5/75	YS-5/127	YS-5/180	YS-10/25	YS-10/50	YS-10/100	YS-10/150	YS-10/200
A, mm	45	97	157	214	267	90	125	178	250	300
B, mm	60	122	232	341	447	115	175	278	400	500
C, mm	45	92	152	209	262	88	119	172	244	294
D, mm	41	42	42	42	42	57	57	57	57	57
E, mm	30	30	30	30	30	43	43	43	43	43
F, mm	25	26	26	26	26	38	38	38	38	38
H, mm	19	19	19	19	19	17	19	19	21	21
J, mm	–	25	25	25	25	–	35	35	35	35
K, mm	–	5	5	5	5	3	6	6	6	6
O, mm	–	M20 x 2	M20 x 2	M20 x 2	M20 x 2	–	M27 x 2	M27 x 2	M27 x 2	M27 x 2
P, mm	–	13	13	13	13	–	17	17	22	22
S, mm	–	–	–	–	–	–	–	–	–	–
U, mm	28.5	28	28	28	28	35	35	35	35	35
V, mm	2 x 5.5 Ø	2 x M6	2 x M6	2 x M6	2 x M6	2 x M8	2 x M8	2 x M8	2 x M8	2 x M8
W, mm	–	23	23	23	23	27	27	27	27	27
X, mm	–	M42 x 1.5	M42 x 1.5	M42 x 1.5	M42 x 1.5	M57 x 1.5	M57 x 1.5	M57 x 1.5	M57 x 1.5	M57 x 1.5
Z, °	5	5	5	5	5	5	5	5	–	–

Model	YS-10/250	YS-10/300	YS-15/25	YS-15/50	YS-15/100	YS-15/150	YS-15/200	YS-15/250	YS-15/300	YS-15/350
A, mm	352	407	110	140	190	260	310	365	420	472
B, mm	602	707	135	190	290	410	510	615	720	822
C, mm	346	401	103	133	183	253	303	358	413	465
D, mm	57	57	67	67	67	67	67	67	67	67
E, mm	43	43	52	52	52	52	52	52	52	52
F, mm	38	38	46	46	46	46	46	46	46	46
H, mm	21	21	19	19	19	22	22	22	22	22
J, mm	35	35	40	40	40	40	40	40	40	40
K, mm	6	6	7	7	7	7	7	7	7	7
O, mm	M27 x 2	M27 x 2	M33 x 2	M33 x 2	M33 x 2	M33 x 2	M33 x 2	M33 x 2	M33 x 2	M33 x 2
P, mm	22	22	19	19	19	25	25	25	25	25
S, mm	–	–	–	–	–	–	–	–	–	–
U, mm	35	35	42	42	42	42	42	42	42	42
V, mm	2 x M8	2 x M8	2 x M10	2 x M10	2 x M10	2 x M10	2 x M10	2 x M10	2 x M10	2 x M10
W, mm	27	27	33	33	33	33	33	33	33	33
X, mm	M57 x 1.5	M57 x 1.5	M67 x 1.5	M67 x 1.5	M67 x 1.5	M67 x 1.5	M67 x 1.5	M67 x 1.5	M67 x 1.5	M67 x 1.5
Z, °	–	–	5	5	5	–	–	–	–	–

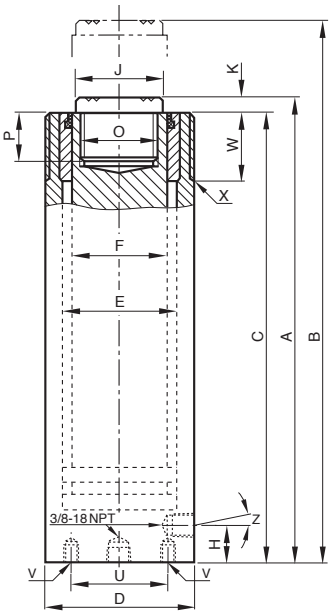
Model	YS-23/25	YS-23/50	YS-23/100	YS-23/160	YS-23/210	YS-23/250	YS-23/300	YS-23/345	YS-30/125	YS-30/200
A, mm	116	150	202	277	330	376	428	477	245	325
B, mm	141	200	302	437	540	626	728	822	370	525
C, mm	113	142	194	269	322	368	420	469	235	315
D, mm	85	85	85	85	85	85	85	85	102	102
E, mm	65	65	65	65	65	65	65	65	75	75
F, mm	56	56	56	56	56	56	56	56	65	65
H, mm	20	22	22	22	22	22	22	22	25	25
J, mm	50	50	50	50	50	50	50	50	50	50
K, mm	3	8	8	8	8	8	8	8	10	10
O, mm	M40 x 2	M40 x 2	M40 x 2	M40 x 2	M40 x 2	M40 x 2	M40 x 2	M40 x 2	M36 x 2	M36 x 2
P, mm	15	22	22	25	25	25	25	25	25	25
S, mm	–	–	–	–	–	–	–	–	–	–
U, mm	55	55	55	55	55	55	55	55	75	75
V, mm	4 x M10	4 x M10	4 x M10	4 x M10	4 x M10	4 x M10	4 x M10	4 x M10	4 x M10	4 x M10
W, mm	40	40	40	40	40	40	40	40	45	45
X, mm	M85 x 2	M85 x 2	M85 x 2	M85 x 2	M85 x 2	M85 x 2	M85 x 2	M85 x 2	M102 x 2	M102 x 2
Z, °	5	–	–	–	–	–	–	–	–	–

Dimensions YS

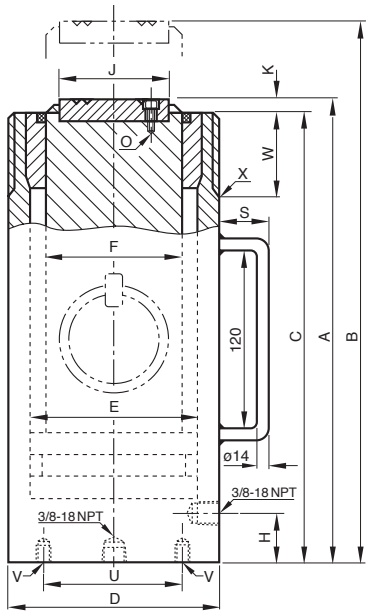
Model	YS-50/50	YS-50/100	YS-50/160	YS-50/320	YS-70/150	YS-70/330	YS-100/100	YS-100/200
A, mm	170	220	285	460	285	490	275	375
B, mm	220	320	445	780	435	820	375	575
C, mm	165	215	280	455	280	485	270	370
D, mm	125	125	125	125	146	146	180	180
E, mm	95	95	95	95	112	112	135	135
F, mm	85	85	85	85	95	95	115	115
H, mm	29	29	29	29	30	30	60	60
J, mm	70	70	70	70	80	80	100	100
K, mm	5	5	5	5	5	5	5	5
O, mm	4 x M8	4 x M8	4 x M8	4 x M8	4 x M8	4 x M8	4 x M10	4 x M10
P, mm	–	–	–	–	–	–	–	–
S, mm	–	51	51	24	24	24	24	24
U, mm	95	95	95	95	110	110	145	145
V, mm	4 x M12	4 x M12	4 x M12	4 x M12	4 x M12	4 x M12	4 x M12	4 x M12
W, mm	50	50	50	50	60	60	70	70
X, mm	M125 x 2	M125 x 2	M125 x 2	M125 x 2	M146 x 3	M146 x 3	M180 x 3	M180 x 3
Z, °	–	–	–	–	–	–	–	–



YS-5/15



YS-5/25 up to YS-30/200



YS-50/50 up to YS-100/200

INFO

Subject to changes.